

Copy to Ward S. ...

INAUGURAL ADDRESS AS HEAD OF THE DEPARTMENT OF SURGERY

UNIVERSITY OF COLORADO

JULY 10, 1950

Gentlemen and Friends:

Needless to say, it is with a deep sense of honor and, at the same time, of obligation and humility that I speak to you tonight for the first time in the capacity of Head of The Department of Surgery of the University of Colorado School of Medicine. Following in the footsteps of successful and respected predecessors, I recognize myself as being strictly "on the spot". Under the able guidance of Dr. Packard, who held the fort during the difficult war years, and of Dr. Foster, who manned the helm during the first years of a period of growth and expansion when our Medical School was busting out all over, under the leadership of these men, the Department of Surgery has maintained the status of what we must frankly and modestly admit was the best Department in the Medical School. It is my job and purpose, ^{and by the grace of God} with your help, to perpetuate this standing, and to achieve a stature where our Department need doff its cap to no other department ^{in any medical school} either here or anywhere else. This, I am sure, is your wish, and therefore I thought it fitting to attempt to define with you tonight some of the purposes and aims of the Department as I see them, and to discuss some of the concepts which I hold to be fundamental in the achievement of these aims. We find ourselves somewhat in the position of the lovelorn young maiden who was having a wonderful dream. As she lay there in her bed, suddenly into the moonlight of her boudoir appeared the figure of a handsome young man. His hair was dark and curly, and in his eyes smoldered

the fire of latent passion. As he approached her bedside, she asked in quivering voice, "What do you wish of me?" - - ^{"Heb!"} "Lady", he said, "its your dream!" Well, its our dream of the future of our Medical School and our Department, and it is our privilege to fill in the details.

But, first, I should like to speak to you for a moment on a subject which I hold to be fundamental to everything which I have to say - : it is the essential reason that you and I are here tonight - I refer, of course, to the relation between medical education and the practice of medicine in the United States, ^{a relationship of mutual interdependence.} I would like to discuss this from an historical point of view, and, with your permission, from rather a personal point of view. I do this deliberately in an attempt perhaps to explain myself and my relationship to American medicine, of which I am a direct fifth generation offspring. I would venture to suggest that perhaps no other man in this room, or even in this city, has roots deeper in the traditions of the practice of medicine in this country than I, and of this heritage I am proud. Yet it has come to my attention that some members of the profession have referred to me in cloakroom conferences as "a millionaire socialist". Now, although I would be the first to rejoice if the first half of this compound fantasy were true, I cannot acquiesce silently to the implications of the second half. I think the vendors of this type of gossip are not like the nice old lady in San Francisco, who during the last war did her part by entertaining at tea the navy personnel from off the boats. One day, after about three hours of tea and cookies, and tea and cookies, she looked around at the group and said, "I have just one more little cookie left. What can I do with it?" After a second of silence, the Bosun's mate piped-up and said, "The first man that answers that question gets 30 days in the brig". ^{as I say,} I think that these vendors of gossip, unlike the nice old lady, know what they can do with their cookie.

But in a more serious vein, I have been asked, "Why do you work so hard out at the School? Surely you don't have to and they don't pay you that much". Perhaps the answer to this question begins way back in about the year 1797, in Royalton, Vermont. *Royalton is a tiny rural town on the Connecticut-Vt. border, approx 2 VT.* In that year a young doctor named Jo Adam Denison moved from Bethel, Vt., to set-up in the practise of medicine. For the next sixty years he lived in this little town, practising his art, and came to be much beloved by the folks for miles around. This man was my great-great grandfather. Here is a picture of Jo Adam Denison, taken late in life.

(Slide #1) *A* It might be worthwhile to contemplate for a moment the nature of the training which qualified the young doctor to enter the practise of medicine in 1797, and to examine the conditions under which he practised. At this time there were but three schools of medicine in all of North America, and these were far removed from Vermont so, as was the custom, he spent a year or two as an apprentice to distinguished practitioners in the area. In his preceptors Jo Adam was extremely fortunate. Dr. Joseph Gallup was one, a man of great energy and local renown who later established the Medical College of Vermont at Woodstock. Dr. Nathan Smith was the other, a man of outstanding stature in New England, who was considered something of an oracle on matters pertaining to medicine. He founded Dartmouth Medical College in 1798, later he founded the Yale Medical College; and as if this were not enough, in his declining years he established a third medical school at Bowdoin^{bi} University. As I say, Jo Adam was fortunate in his preceptors, and I am sure that he learned all they had to teach, although this was little enough - - anatomy, without dissection, a little materia medica, and a great deal of common sense psychiatry. Pathology, bacteriology, biological chemistry, and physiology were yet to be born.

This was the day of the "horse" doctor, not yet the horse and buggy doctor.

Some of you have examined and perhaps the rest may wish to after this discussion, old Dr. Jo Adam's saddlebags containing the tools of his trade exactly as he left them at his death a hundred years ago. The powders are all done up in deerhide packets, labelled in his hand, mostly purgatives. I think you would find the castor oil is still quite effective. I tried some once with very good results. Only one ^{type of} surgical instrument, a sort of currette to scrape out chronic sinuses or granulating bone. Perhaps it could be used as a blood letting knife or a coarse trephine.

Nights and days on the trails, often away from home for a week at a time, messengers following to ask his aid at some distant place, often bedding down his horse in some farmer's barn while he himself sought a few hours release from fatigue in the hayloft above, these were the conditions under which he brought comfort, human understanding, and strength in adversity to his patients. He had little else to bring them.

One of his patients later achieved both notoriety and fame. In 1805 in Sharon, Vt., he officiated at the birth of one Joseph Smith, who later became the founder of the Mormon Church.

In recognition of his services to the community, in 1830 he was awarded an honorary "M.D." degree by Waterville College (later Colby) in the Republic of Maine. This degree was apparently awarded at the request of The Clinical School of Medicine which later became the University of Vermont. Here is a photograph of this diploma.

Things had changed a bit when his son, Jo Adam Jr., born in 1805, decided to study medicine. Schools were now more available. After obtaining his B.A. degree at the University of Vermont, he attended Dartmouth Medical School for one year, then went to study under Nathan Smith, now at Yale, and after another year of study received his M.D. degree from that institution in 1828. He took

his "internship" in the fashion of his day by signing up for a couple of years with a physician in Lockport, N.Y., before joining his father in practise in Royalton. During this period he received many letters of goodly advice from his father, among which is one which I think we would find practical today. The elder Jo Adam writes his son just starting in the practise of medicine, "Avoid, if possible, making any enemies, especially among the envious, mean, and low-minded, remember that a viper in the grass in your path is more dangerous than a lion in the open field- be careful never by look or word to offend a nurse or an old woman. For every nurse you offend, you lose 30 patients; for every old woman, 20 or more - -".

Although, he had been trained at two of the good medical schools of the time, Jo Adam Jr. had little new information to take to his father. The medical schools were in the embryo stage; the basic sciences (save anatomy) were still unborn; research and the scientific method were matters for the future. From France, the stethoscope had not yet reached Vermont; the establishment of surgery as a science based on surgical pathology was still confined to John Hunter's England; the medical schools of America had not yet begun to influence the quality of medical care by contributing to the scientific knowledge fundamental to such advances; medicine was still practised almost exclusively by the heart, and by common sense and tradition.

You might be interested to take a glimpse over the shoulder of the young medical student at Yale, busily taking down lecture notes in 1828. The great Dr. Nathan Smith is speaking - -

"I. Disease of the Nervous System.

In mania, blistering the head, though much advised by some, is always injurious but blistering other parts of the body, as the feet, have a

good effect. Yellow and white daisy, bruised and made into a poultice, applied to the feet seem to detriment the blood from the head, and by making the feet sore, serve as a straight jacket". The bowels of maniacs are mostly costive. Cathartics and laxatives are therefore generally of much benefit.

In epilepsy, in general, if the disease is of any time standing, cure is improbable. Bleeding does much good. If done while the patient is in a fit, it has sometimes prevented a recurrence for years. Sometimes there occurs the epileptic aura. When it commences in one of the limbs the fit may be prevented by a ligature above the aura, thus intercepting the attack. Always take care to keep the bowels regular. A course of cathartics long continued may be good practise.

In asphyxia from drowning, water seldom gets in the lungs because of the spasmodic closure of the larynx. If no water reaches the lungs the patient may be recovered, if he has not been in the water too long. Some die sooner. Some later.

In apoplexy, the functions of animal life are all suspended. The patient falls insensible, countenance flushed. The intestines slow and torpid. Pathology: It occurs after middle age in those who are corpulent with short necks and large heads. Some think it may arise from irritation in the stomach - It certainly is sometimes produced by a very full meal, especially if done before going to bed. Treatment. When the pulse is full - the fit plethoric - bleed largely, then empty the stomach with emetics that will act quickly and powerfully, then give powerful cathartics, blistering and diaphoretics.

II. On Inflammation (Dr. Smith continues) - -

Inflammation is either acute or chronic, phlegmonous, erysepeletous, or congestive. In all cases, there is a discrepancy between the action of the

arterial and the venous capillaries - indeed- the seat of febrile diseases is in the capillary system, consisting of an increased action of one over the other. If the arterial capillaries have the balance of power, the fever is eutonic or toxic - if the venous capillaries have the ascendancy, the excitement is called atonic or atoxic. Now according to our theory, if the capillary arteries convey more blood to a part than the venous capillaries can or do carry off, then a state of diseases is produced we call eutonic. If on the other hand, the venous capillaries - - -".

Well, enough of this. That sounds too much like one of my lectures. It goes on for pages. He concludes that bleeding is good treatment but not to forget the cathartics, emetics, and the counter irritants.

Slide #4
Parenthetically, at this point I would like to point out that not every-
one who entered medical practise[~] that day went to medical school. Another of my ancestors, Dr. Nathaniel Fuller, born in 1791, apparently studied under the preceptorship of a Dr. Perly Scott in Cabot, Vermont. We have no record of any diploma or any licensure, but one of Dr. Fuller's sons was named Perly Scott. In those days of big families, to name a child in honor of one's preceptor was common practise. Dr. Fuller moved from Vermont to Utica, Ohio, early in his career, and thus became a pioneer doctor, riding the trails of the newly acquired Northwest Territory. He died in 1854. Here is a daguerrotype taken late in life, and the mortar and pestle which you see on the table was the one he used to compound his medicines. In those days, of course, the frontier doctor was his own pharmacist.

But to return to Jo Adam Jr. the conditions of practise in Royalton were somewhat improved over the early days. There were enough roads now, so a gig could be used; and in 1847, the year before his death, even the railroad came to Royalton, the track being laid across a corner of Great-grandfather's little farm. Jo Adam, Sr. bought himself the travelling bag you see on the table to

Side #8
go down to Concord ~~to~~, after he assured himself that the boilers were safe. However, the dangers of the profession were still great. In 1848, Jo Adam, Jr. was returning one night from a call, when his horse slipped, upsetting the gig over a steep incline, severely injuring the doctor. After a few months of ill health, he died of his injuries. He left behind his wife, his 10 living children, and an estate which was valued at \$1,087.01. The only picture we have is a death mask, and clearly shows the deformity resulting from his head injury.

Growing up as the youngest child in a big family, with no father around to ease the way, Charles Denison learned the habit of hard work at an early age, a habit he never relinquished. He put himself through Williams College graduating in 1867, and then, by being instructor of gymnastics on the side, through the Medical Department of the University of Vermont, where he graduated as valedictorian of his class in 1869. Medical school was still a two year course. After a year in New York and a year as house surgeon at the Hartford City Hospital, he entered practise in 1871 in Hartford, Conn. His health failed, however, and a severe pulmonary hemorrhage forced him to abandon medicine temporarily and to come to Denver in 1873, in search of health. He soon recovered, and thus he acquired his life-long interest in tuberculosis and the value of climate in its prevention and treatment. Although engaged in a busy private practise, he found the time, mostly nights and Sundays, to pursue research in tuberculosis and in the effect of climate on disease. Four books and 75 contributions to the journals indicate the volume of his efforts. His influence was great in establishing Colorado as a health center, and in his wake came the many sanatoria and health resorts of the state. Although Colorado climate could be sold well in most areas, apparently, then as now, Texas had

her own ideas. Charley's nephew, Willie, also recovering from tuberculosis went from Denver to Texas for a while, attempting to sell Charley's book "The Rocky Mountain Health Resorts" as a missionary effort. He found himself somewhat in the position of the old chronic alcoholic who, when well in his cups one night, was inadvertently given a glass of pure water by the bartender. After tasting it carefully he said, "This stuff is alright, but I don't think it will sell". Willie wrote his sister from San Antonio in 1882 as follows, "I agreed to peddle Charley's maps for him. He thinks they are as necessary to life as bread. The maps show hard work, but they are not in demand here".

Dr. Charles was also somewhat of an inventor. His stethoscope, spirometer, inhalator, rib-cutter, nasal dilators, and tuberculin syringe were but a few of the manifestations of his originality.

As was proper, recognition of his professional excellence came from near and far. When Denver University Medical Department was founded, he was named Professor of Chest Diseases and Climatology. He was Secretary of the State Medical Society and Secretary and later President of the Denver County Society during the early years of their establishment as organizations. *In many years he was Chief Surgeon of the Rio Grande Railroad.*
In 1890, he was elected President of the American Climatological Association, and in 1901, honorary Vice-President of the International Congress on Tuberculosis in London, England, where he went to present two papers.

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He died in 1909 at the age of 64 of a ruptured gallbladder. This picture is one (Slide) familiar to you all, the Johansen portrait, which hangs in the library. Like many doctors, Grandfather Charley, though an excellent physician, was a total flop as a business man. At his death he left a small estate, an insurance policy and a trunk full of worthless mining stock for

which he had an addiction not unlike the race track fan has for the ponies.

The period of Dr. Charles Denison's lifetime was the era of the entrance of American medicine onto the world stage and of the growth and development of American medical education. Medical practise changed its spots with the growth of fundamental knowledge, and in this era surgery came of age. Anesthesia, an American contribution; asepsis, from France and England; and hemostasis, from Switzerland and Austria, and later fully developed ^{by Dr. Halsted} in America, - these three cornerstones of modern surgery were all developed in this period. The means of communication of knowledge - the journals and the medical schools - the means of developing and testing new ideas, new agents, new methods of therapy - again the medical schools brought to the practising physician young and old re-orientation to the rapidly changing horizons of his art. The patient, and the doctor, reaped the rewards.

Slide 4
Thus when Dr. Charley's son Henry entered medicine (Slide), he could be trained with a four year course under the "Big Four" at Johns Hopkins, where he graduated with highest honors in 1908. He could then go on to take residency training at the Massachusetts General Hospital. Europe had nothing better to offer than this. His untimely accidental death at the age of 29, robbed Colorado medicine of one of its most promising members.

Slide 5
Thus, in the ^{present} history of my own family, I see the story of the growth and development of American medicine and its relation to the evolution of medical education in this country. And I must confess to a considerable feeling of personal identification with and pride in, the accomplishments of these men as they sought, over the past 150 years, to bring the best

medicine of which they were capable to their patients, and to practise
their art in the manner of their time with honor and compassion. To ^{for my part, therefore,}
contribute, if possible, to the further development of both the substance
of medical knowledge and the methods of its dissemination, and to help
train men ~~to undertake~~ to continue in the tradition of this heritage is
my purpose here at the Medical School at Colorado, ~~and by the way, I believe,~~

This medical school is young, but then Colorado is young. We did
not achieve statehood until three years after Charles Denison came to
Denver. We are currently in the throes of a rebirth of interest and
endeavor in the attempt to elevate the standing of this school to a
place of esteem in the national picture. Some of us have high hopes and
high goals; we can see no real reason why our school cannot grow to be
the best. What are the fundamental qualities which permit a school to
rise to the caliber of excellence? As one looks at the history of certain
medical schools, one is impressed by the fact that they seem to pass
through eras of greatness only to be superceded at another period by
other schools. As I see it, this periodicity is a function ^{first} of the stature
of the faculty, particularly the chiefs of service, ^{second} and of the environment
in which they work. No medical school is greater than the men who work
there in spite of bricks and stones and paper programs. No faculty achieves
greatness unless there exists the environmental atmosphere in which individual
eminence is considered not only possible but desirable. ^{third} Medicine cannot
be taught in an ivory tower. (Good teachers of medicine are rarely scholarly
theorists. They are men of active participation in the practise of their
art, with a depth of personality and a capacity for experience, motivated
by a sincerity of interest and of purpose. They attain stature only in a

situation which allows them to develop in their special fields of interest, which widens their clinical experience by the study of patients who are unrestricted by geographic or economic barriers, and which stimulates them by the friendly but ~~competitive~~ association with their fellow students and teachers. At any given moment in time when a medical school finds itself with a group of young men of promise working in such an environment, the ingredients are in the crucible to distill excellence. It is for this reason that efforts have been made and will continue to be made to enrich the environmental atmosphere at this school that it may seek its place in the sun. In these efforts, I feel sure, the School will have your loyal support and sympathetic understanding.

What I have been saying about a medical school as a whole applies equally to its Departments, and its strength is essentially a phenomenon of Department strength. Let us examine for a moment what I take to be the fundamentals of quality of a Medical School department.

Number one, I would list a strong residency training program. This is, in fact, the very backbone of a department because to achieve it, the department must meet certain essential pre-requisites. That a good residency system is essential to the quality of patient care and to the caliber of teaching at all levels goes without saying. But the ability to create such a program ^{as I say} implies the attainment of certain rigorous and exacting requirements. In the first place, obviously, we must have the power to attract to our department men of outstanding caliber who wish to obtain their surgical training here. To do this we must first have adequate clinical facilities and, secondly, we must have a strong full-time ^{volunteer} and ~~part-time~~ staff of men who are both capable and willing to teach. These

men must work together to create a service in which exists the spirit of inquiry, the constant study and application of the science as it bears on the art of medicine. There must be the spirit of interest in the patient, a concept of service in which the patient's needs are primary above all other considerations. There must be the spirit of human understanding, springing from tolerance and real affection in the patient-doctor relationship, and to all this, in addition, must be added the spirit of humility.

Having attracted good men to our program we must give them the opportunity to learn by doing. This means the establishment of the specific policy of progressive responsibility - responsibility for the care of the patient, for the development of the power of decision, and for the opportunity to grow by practise. In times past when we had only a short residency, a high percentage of the operating done in this hospital was performed by Junior visiting staff men. With the development of the five year residency training program, the resident staff as they reach a suitable stage in their training will in the future perform the vast majority of the operations on the surgical service. At the moment, about 80% of our surgical procedures are now performed by the resident staff. In the future, I presume, this figure will be even higher. ~~Ø~~ In addition, hand in hand with the opportunity for growth through responsibility, we must supply the opportunity of intellectual growth through facilities for clinical and experimental research. This implies a staff interested and active in research problems. At the present time we have certain experimental research facilities available in the Halsted Experimental Laboratory and in the Cardiovascular Pulmonary Laboratory. These facilities will be augmented

next year with the completion of the Cancer Research Wing of which the entire top floor is to be devoted to surgical research. In addition, through the efforts of Dr. Peck, a physiological research laboratory will be started at Denver General Hospital. However, it must be admitted that even our existing facilities are insufficiently utilized by the members of our staff and I am in strong hopes that the volume and quality of our research endeavors will soon increase. In the long run this is crucial to our prestige and to the power of attraction which I mentioned above. "By their works shall ye know them!", and we, in this Department, must increase and extend the scope of our works.

If, then, we can accomplish these requirements for the development of a strong and desirable residency system, we will have incidentally and inevitably attained the requirements of a strong and successful department.

Specifically then as regards our Department of Surgery I would summarize our immediate program as follows: Our aim is to become as good as or better than any other Department of Surgery of similar size and scope in any other medical school in this country. To accomplish this aim we must primarily concentrate on the continued development of a department staff which is united in purpose. Such a staff would contain a corps of full-time men of potential promise and we must create for them the environmental atmosphere of which I spoke to allow their growth to stature. Full-time men will be added in those surgical sub-specialties which are of sufficient size in our Department to warrant their services. The main body and strength of our Department staff, however, will be composed of men like

yourselves, the Volunteer Staff. Men who are interested sincerely in medical education, who have been well-trained and are capable, who have the attitude of responsibility in terms of patient care, who feel a sense of loyalty both to the Department and to the School, and who are willing to take the time from their busy lives to give of themselves and their knowledge to our residency staff and to the care of the patients under the responsibility of the Department. In most instances this means the willingness to create the time for as you all well know, ~~the exacting~~ ^{medical} demands of practise ~~are~~ ^{is} a stern mistress and a man must have a real desire to reap the intangible rewards of the teaching relationship if he is to enforce the discipline of making the time to achieve it.

Since these are exacting demands I presume that our Department Staff will be one which will be hard to get on but one, I hope, all of us will be proud to be on.

With such a staff composition we must continue to foster the active participation of the staff in the management of the Department. As you know, a strong start in this direction was initiated last year by Dr. Foster in the creation of an Executive Committee of the Department. The proper functions of this Committee are to represent the various interests of the specialties and of the individual members of the Department and to aid in the development of policy and participate in the execution of all Department functions. It is my purpose to extend the breadth of the membership of this Committee and to foster in every way the development of its potential capacities. This Committee, therefore, will be composed of, first, all of the full-time members of the Department including the sub-specialties;

secondly, all Heads of Divisions, both at Colorado General and Denver General Hospitals, when as in certain instances the Heads of the Division in the two hospitals are different individuals; and, thirdly, a member to specifically represent the interests of the volunteer staff per se, because, although almost all Division Chiefs are Volunteer Staff men, they sit on the Committee primarily to represent their particular specialty staffs and I feel that it would be only proper and wise that volunteer men as a whole should be represented upon this Committee. I propose that we will meet quarterly and that such matters as appointments, promotions, staff services, patient policies, inter-divisional relationships, curriculum and any other matters which are pertinent shall be discussed and settled. After all this is your Department and I hope that such a Committee functioning democratically will enhance your ability to help me in the guidance of its growth and development.

With such a staff we must take care to insure ourselves of an adequate supply of clinical teaching material. In this regard at the present time, the Denver General Hospital and the Colorado General Hospital are of equal importance to us. We consider our service responsibilities as a staff unit identical in both institutions. If in the course of the changing pattern of medical care programs we become threatened with the loss of the indigent patient as a teaching patient we must assure ourselves of adequate clinical material from patients in the insurance group and from private patients, all of whom must be handled with the same attitude of quality of service, which is to say that all of them must be teaching patients. Such a system can introduce a form of tangible reward to the Volunteer Faculty which has hitherto not been available in this Medical School, that is, the opportunity

I have asked Mr. Foster to serve in this capacity to the Faculty

The advent of the Veterans Hospital to the campus will be a great help.

of having private patients in the University teaching hospitals. It is
my presumption that ~~with adequate clinical material and with such an active,~~
~~interested staff,~~ *having accomplished these things* we will attract to us strong young men to enter our
residency program, and having attracted them here we will give them the
opportunity and the guidance to develop in our specialty. It will automat-
ically follow that with such a residency staff we will have strong student
and intern teaching, the development of clinical and experimental research
and superb patient care. ~~and~~ *We will be able to continue to be of service in the training programs of*
If we can do this, the Department of Surgery will *our affiliated*
contribute its share to the over-all development of a great medical school *hospitals.*
in this area, which will take the lead in the ~~development of advancement~~ *elevation of new*
medical knowledge and which will graduate from its training programs men
to enter the practise of medicine well-founded in the fundamental sciences
and imbued with the traditions of our proud heritage of American medicine.